

Important Safety Instructions

1) Read these instructions.

All the safety and operating instructions should be read before the appliance is operated.

2) Keep these instructions.

The safety and operating instructions should be retained for future reference.

3) Heed all warnings.

All warnings on the appliance and in the operating instructions should be adhered to.

4) Follow all instructions.

All operating and use instructions should be followed.

5) Do not use this apparatus near water.

For example, near a bathtub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.

6) Clean only with dry cloth.

Do not use liquid cleaners or aerosol cleaners. Use a dry cloth for cleaning.

- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. Slots and Openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
 - This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments / accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over.





- 13) Unplug this apparatus during lightning storms or when unused for long periods of time. This will prevent damage to the product due to lightning and power-line surges.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

CAUTION : This TV set is intended to be used with the following TV stand: model TY-S34WX53 for the CT-34WX53. Use with other stands may result in the TV set becoming unstable, possibly causing injury.

Dear Panasonic Customer

Welcome to the Panasonic family of customers. We hope that you will have many years of enjoyment from your new color television set.

To obtain maximum benefit from your set, please read these Instructions before making any adjustments, and retain them for future reference.

Retain your purchase receipt also, and record the model number and serial number of your set in the space provided on the back cover of these instructions.

Visit our Panasonic Web Site for USA: www.panasonic.com

for Puerto Rico: www.panasonic.com for Canada: www.panasonic.ca

For assistance, please call: 1-888-VIEW-PTV(843-9788)

or send e-mail to : consumerproducts@panasonic.com

or visit us at www.panasonic.com (U.S.A)

For assistance, please call: 787-750-4300

or visit us at www.panasonic.com

(Puerto Rico)

For assistance, please call: 1-800-561-5505

or visit us at www.panasonic.ca

(Canada)

Federal Communication Commission Information

This equipment has been tested and found to comply with the limits for a TV Broadcast Receiver, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. If this equipment does cause or receive interference, which can be determined by turning equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

Reorient or relocate the TV antenna.

Increase the separation between TV and other equipment.

Connect TV into separate outlet from other equipment.

Consult the dealer or an experienced radio/TV technician for help.

Note:

This product utilizes both a Cathode Ray Tube (CRT) and other components that contain lead. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information please contact your local authorities, or the Electronics Industries Alliance: http://www.eiae.org.>

FCC CAUTION:

Pursuant to 47CFR, Part 15.21 of the FCC rules, any changes or modifications to this TV not expressly approved by Matsushita Electric Corporation of America could result in harmful interference and would void the user's authority to operate this device.

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AI SOUND		•	
BBE VIVA / BBE			
===			

Installation

Receiver Location

This unit is intended to be used with an optional stand or entertainment center. Consult your dealer for available options. Locate for comfortable viewing. Avoid placing where sunlight or other bright light (including reflections) will fall on the screen.

Use of some types of fluorescent lighting can reduce remote control transmitter range.

Adequate ventilation is essential to prevent internal component failure. Keep away from areas of excessive heat or moisture. To ensure optimum color purity do not position magnetic equipment (motors, fans, other speakers, etc.) nearby.

Optional External Equipment

The Video/Audio connection between components can be made with shielded video and audio cables. For best performance, video cables should utilize 75 ohm coaxial shielded wire. Cables are available from your dealer or electronic supply store. Before you purchase any cables, be sure you know what type of output and input connectors your various components require. Also determine the length of cable you will need.

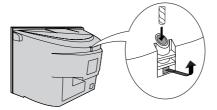
AC Power Supply Cord

CAUTION: To prevent electric shock, match wide blade of plug to wide slot of AC outlet and fully insert. Do not use this (polarized) plug with a receptacle or other outlet unless the blade can be fully inserted to prevent blade exposure.

Safety Precaution

Please take safety precautions to prevent the unit from falling over.

The unit may fall over during earthquakes, or if someone stands on or shakes the TV.



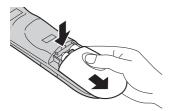
Fixing to a wall

Use a strong rope or a chain (not included) to fasten the TV firmly to a strong support such as a wall or pillar.

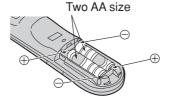
Remote Control Battery Installation

Requires two AA batteries.

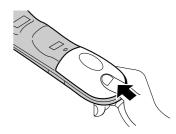
 Turn the Transmitter face down. Remove top cover by pressing down on marking and sliding cover off in the direction indicated.



 Install the batteries as shown in the battery compartment. (Polarity + or – must match the markings in the compartment).



Replace the cover and slide in reverse until the lock snaps.



Helpful Hints:

For frequent remote control users, replace old batteries with alkaline batteries for longer life.

Helpful Hints:

Whenever you remove the batteries, you may need to reset the remote control infrared codes. We recommend that you record the code on page 49, prior to setting up the remote control.

⚠ Precaution on battery use

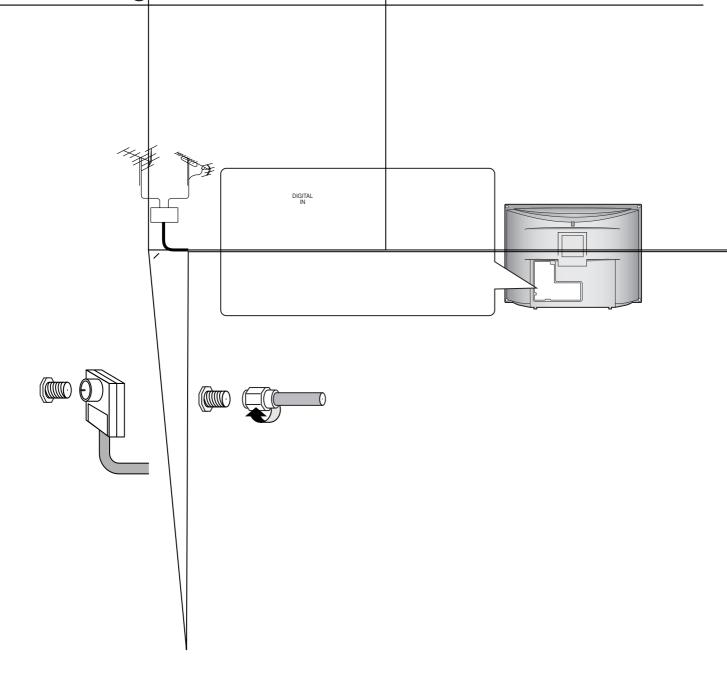
Incorrect installation can cause battery leakage and corrosion that will damage the remote control transmitter.

Observe the following precautions:

- 1. Batteries should always be replaced as a pair. Always use new batteries when replacing the old set.
- 2. Do not combine a used battery with a new one.
- 3. Do not mix battery types (example: "Zinc Carbon" with "Alkaline").
- 4. Do not attempt to charge, short-circuit, disassemble, heat or burn used batteries.
- Battery replacement is necessary when remote control acts sporadically or stops operating the TV set.

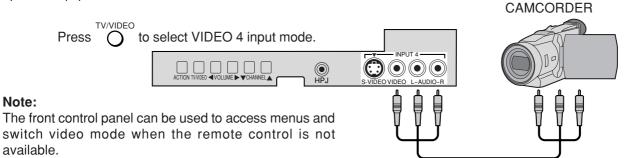
Cable Connection

Connecting the Aerial cable to the RF In Terminal



Front Control Panel

Push to open the front panel of the television to use the TV without remote control or to use the Audio/Video input jacks for optional equipment.



A second VCR, video disc player, video game equipment and DSS equipment can also be connected to the video inputs. See the optional equipment manual for details.

Procedure •

- 1. Connect equipment to front Audio/Video input jacks.
- 2. Operate optional equipment as instructed in equipment manual.

Note:

Note:

The S-VIDEO connection provides higher quality picture. It overrides other VIDEO connections. Use INPUT 4, AUDIO L and R with S-VIDEO connection.

CONNECTIONS ON BACK OF TV

Optional Equipment Connections

Cable Box Connection

Follow this diagram when connecting your television to a cable box only.

CABLE BOX Incoming Cable COMPONENT VIDEO INPUT ANT1 (• (•) (• (\bullet) ANT2 **CABLES NOT** ANT OUTPUT **SUPPLIED**

Note: The remote control must be programmed with supplied codes to operate the cable box (see page 51).

Viewing a premium (scrambled) cable channel

Procedure ¹

- 1. Select ANT2 in the SET UP menu.
- 2. Tune the television to Channel 3 or Channel 4.
- 3. Using the cable box, tune to the premium cable channel you would like to view.

Note:

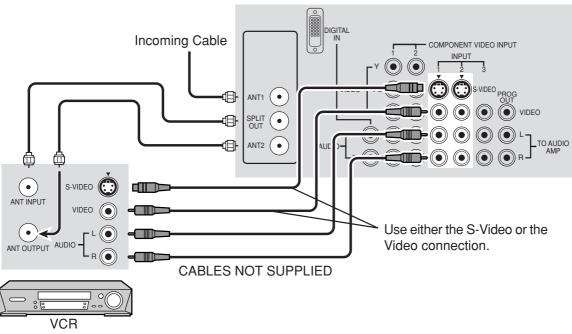
To use special features such as Favorite Channels and Channel Captions, ANT1 must be selected in the SET UP menu (see page 20).

8

VCR Connection

Follow this diagram when connecting your television to a VCR only.

CONNECTIONS ON BACK OF TV



Note: The remote control must be programmed with supplied codes to operate the VCR (see page 49, 50).

Viewing a television program

Procedure •

- 1. Select ANT1 in the SET UP menu.
- 2. Tune the television to the television program you would like to view.

Viewing a video

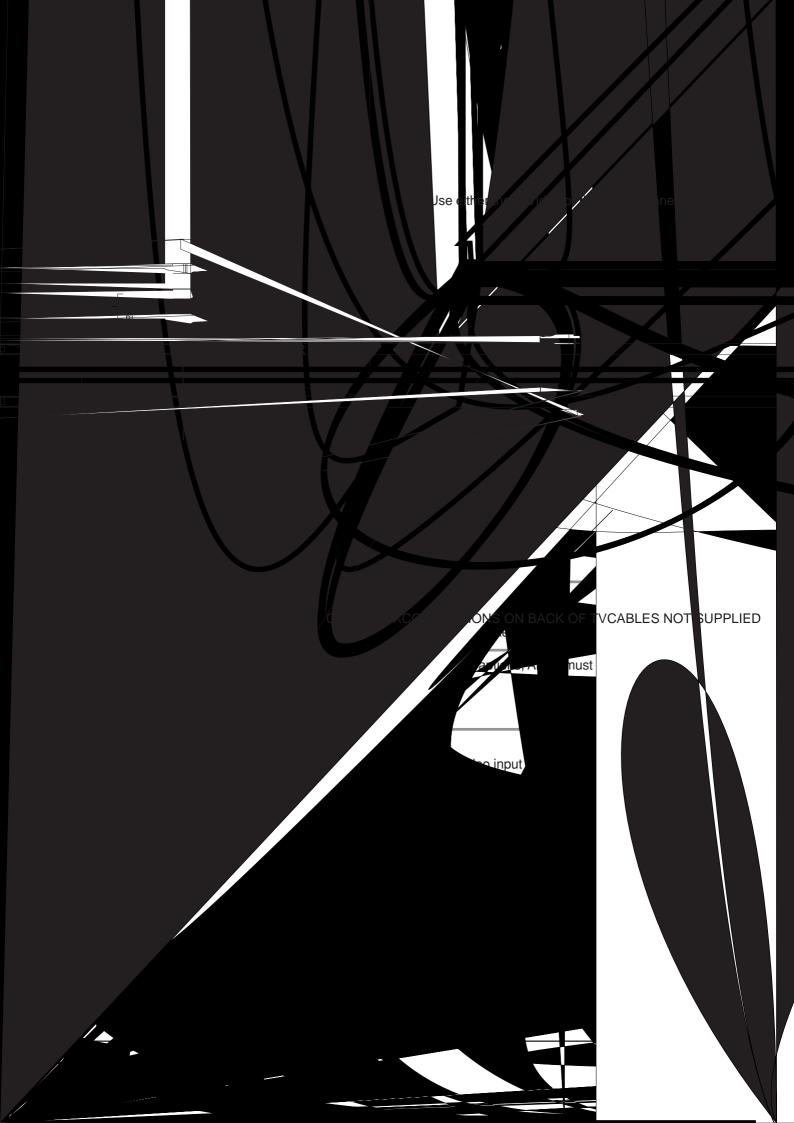
- Procedure

- Option A
 - 1. Press the TV/VIDEO button on the remote control to select the video input (VIDEO 1, VIDEO 2, etc.) connected to your VCR.
- 2. Begin the video.
- Option B
 - 1. Select ANT2 in the SET UP menu.
 - 2. Tune the television to Channel 3 or 4, depending on your VCR.
 - 3. Begin the video.

Recording a television program

Procedure

- Option A (Recording and viewing the same program)
 - 1. Select ANT2 in the SET UP menu.
 - 2. Tune the television to Channel 3 or 4, depending on your VCR.
 - 3. Using the VCR, tune to the television program you would like to record.
 - 4. Begin recording.
- Option B (Recording one program while viewing another program)
 - 1. Select ANT1 in the SET UP menu.
 - 2. Press the TV/VIDEO button on the remote control to select the video input (VIDEO 1, VIDEO 2, etc.) connected to your VCR.
 - 3. Using the VCR, tune to the television program you would like to record.
 - 4. Begin recording.
 - 5. Press the TV/VIDEO button on the remote control to switch back to TV mode.
 - 6. Tune the television to the program you would like to view.

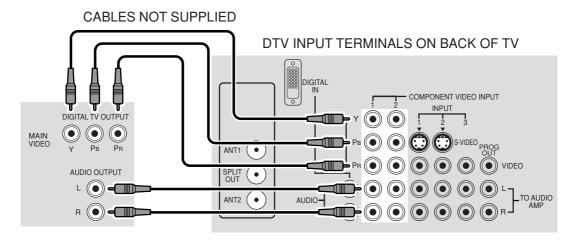


Digital TV - Set-Top Box (DTV-STB) or DVD Connection

This television is capable of displaying 1080i and 480p DTV signals when connected to a DTV Tuner set-top-box (STB). In order to view DTV programming, the STB must be connected to the component video inputs (Y, PB, PR) of the television. A DTV signal must be available in your area. Select the output of the STB to either 1080i or 480p.

This television also utilizes a progressive scan doubler, which de-interlaces the NTSC signal and progressively scans the image. This allows you to sit close to the TV and not see the thin black horizontal lines (venetian blind effect) associated with interlaced TV pictures.

Use this diagram to connect the Panasonic DTV-STB (Digital TV-Set-Top Box) or DVD Player to the back of your TV.



Note:

There are 2 sets of three video inputs, Y, P_B , and P_R . Separate component color inputs provide luminance and color separation. Use the L (left) and R (right) audio inputs.

Amplifier Connection (TO AUDIO AMP)

To listen through a separate stereo system, connect an external audio amplifier TO AUDIO AMP inputs on back of television.

Note: TO AUDIO AMP terminals cannot be connected directly to external speakers.

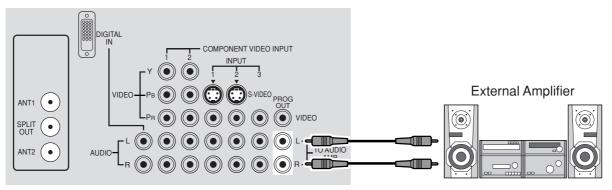
Audio Adjustments

- Procedure

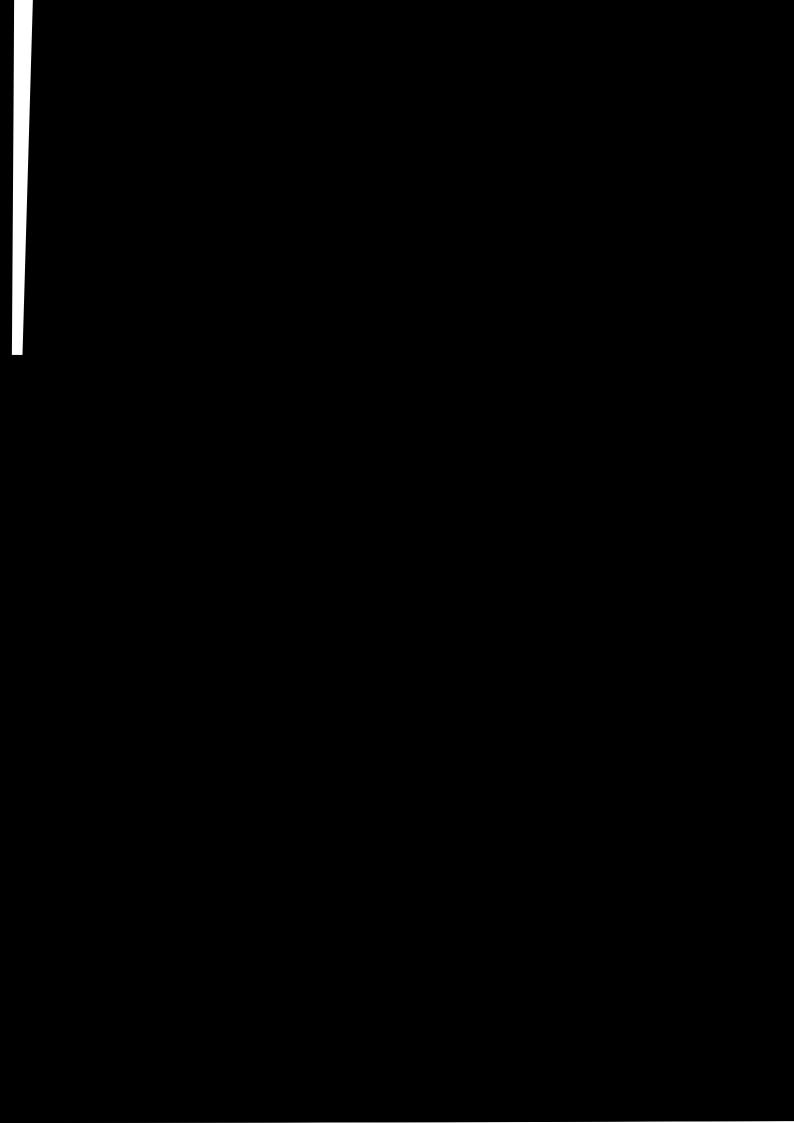
- 1. Select SPEAKERS ON located in the onscreen AUDIO menu.
- 2. Set amplifier volume to minimum.
- 3. Adjust television volume to desired level.
- 4. Adjust amplifier volume to match the television.
- 5. Select SPEAKERS OFF & VARIABLE AUDIO OUT from AUDIO menu.
- 6. Volume, mute, bass, treble and balance are now controlled through the television.

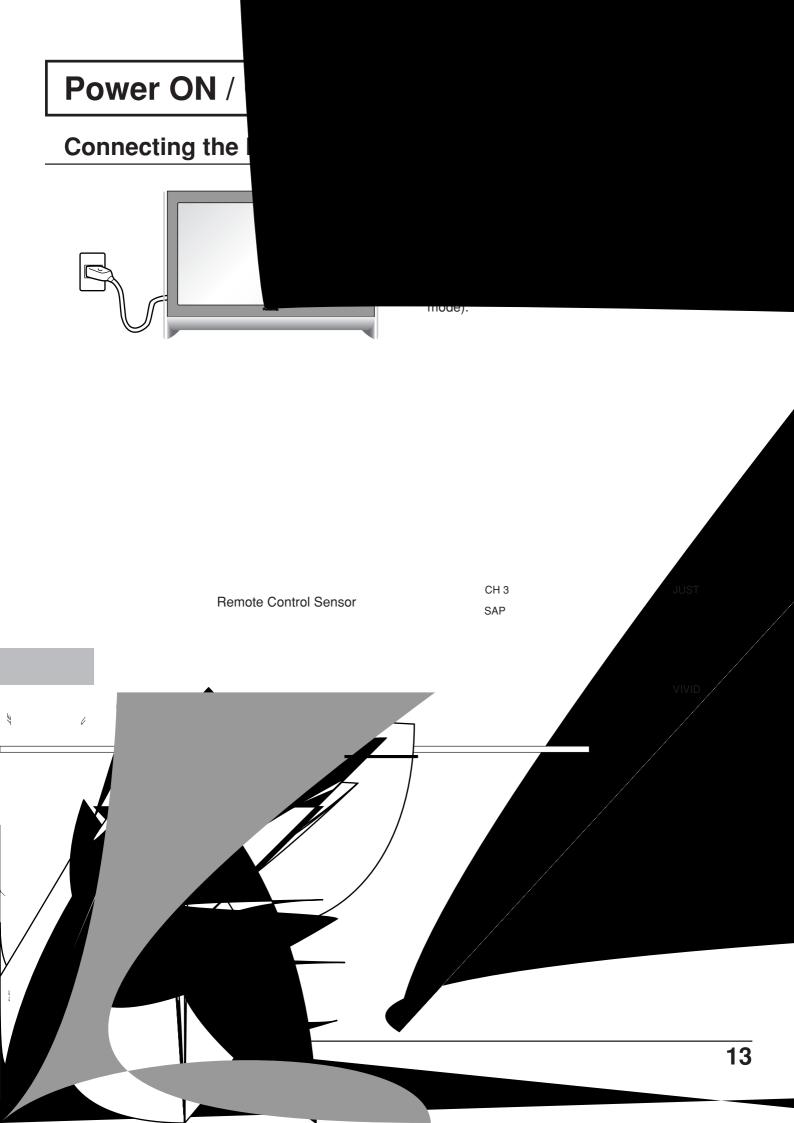
Select SPEAKERS OFF & FIXED AUDIO OUT to control audio functions through the external amplifier.

CONNECTIONS ON BACK OF TV



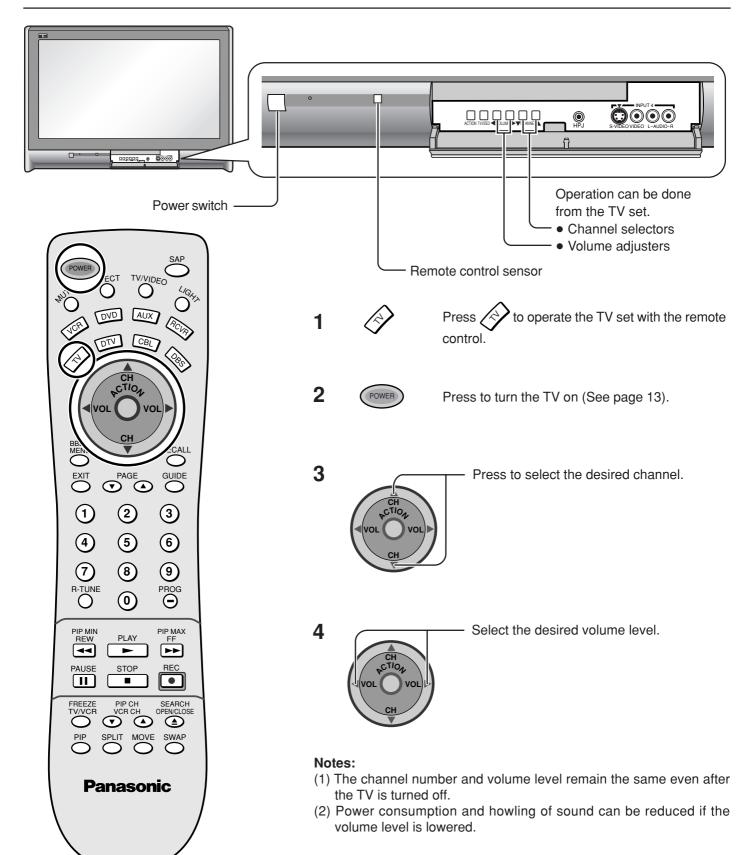
CABLES NOT SUPPLIED





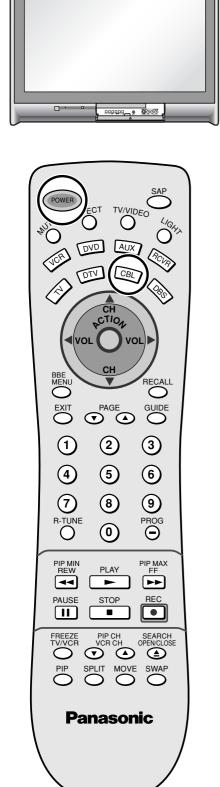
VHF, UHF and Cable TV

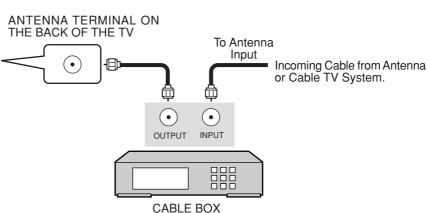
VHF and UHF



Cable TV

When the antenna cable is connected to the TV antenna terminal via a cable box or VCR, set the TV channel to CH3 or CH4. This does not apply when signal is input from VIDEO INPUT.





Confirming

Confirm that registration with cable TV provider and connection of equipment are completed. Turn the CABLE BOX on and select the desired volume level.

- 1 Press CBL to confirm.
- Press while pointing the remote control towards the CABLE BOX.

Note:

The remote control code number is set for Panasonic products.

When peripheral equipment does not operate, reset code (See page 47 - 48).

3 Operate the CABLE BOX and select the desired volume level.

Location of Controls

Illuminated Remote Control

Power button

Press to turn the TV ON or OFF (See page 13).

Note: The TV's power cord must first be plugged into the wall outlet and then turned on at the POWER switch (standby mode).

ASPECT button -

Change of screen size (See page 46).

 $4:3 \longrightarrow ZOOM \longrightarrow FULL \longrightarrow JUST$

MUTE button

Press this button to mute the sound, press again to cancel the mute.

Mode Selection buttons

Selects the operation mode for the remote control. (See page 48)

Digital Video Disk Mode Selection for Remote Control -

Aux Mode Selection for Remote Control

VCR Mode Selection for Remote Control

Receiver/Amplifier Mode Selection for Remote Control

TV Mode Selection for Remote Control

Digital TV Mode Selection for Remote Control

Digital Broadcasting Satellite for Remote Control

Cable TV Mode Selection for Remote Control

R-TUNE R-TUNE button

Switches to previously viewed channel or video mode.

Operation of other Device

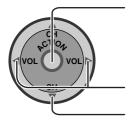
Buttons Device	PIP MIN PIP MAX FF	PLAY -	PAUSE	STOP
TV	PIP Minimize/Maximize			_
VCR	VCR REW/FF	PLAY	Pause	STOP
CABLE/DBS	_	_	-	_
DVD/LD/CD	Skip Search REW/FF	PLAY	Pause	STOP
RCVR	Surround —/+	_	_	_

Buttons Device	REC	FREEZE TV/VCR	PIP CH VCR CH	SEARCH OPEN/CLOSE
TV		PIP or SPLIT FREEZE	PIP or SPLIT CH up/down	PIP Search
VCR	VCR RECORD	TV/VCR Switch	VCR CH up/down	_
CABLE/DBS	DBS RECORD	TV/DBS Switch	TV/DBS CH up/down	_
DVD/LD/CD	_	-	_	OPEN/CLOSE
RCVR	_	_	_	_



Basic Menu Operations

1



Press to display the menu screen.

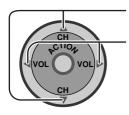
Press to select desired menu icon.

Press to enter submenu field.





2



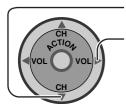
Press to select desired submenu feature.

Press to select or adjust.





[for OTHER ADJ.]



Press to select OTHER ADJ.

Press to enter option menu field.

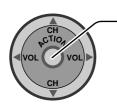


Proceed to selection and adjustment of the option menu.





To return to MAIN MENU: To return to previous screen:

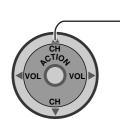


Press to return.





To end adjustments:



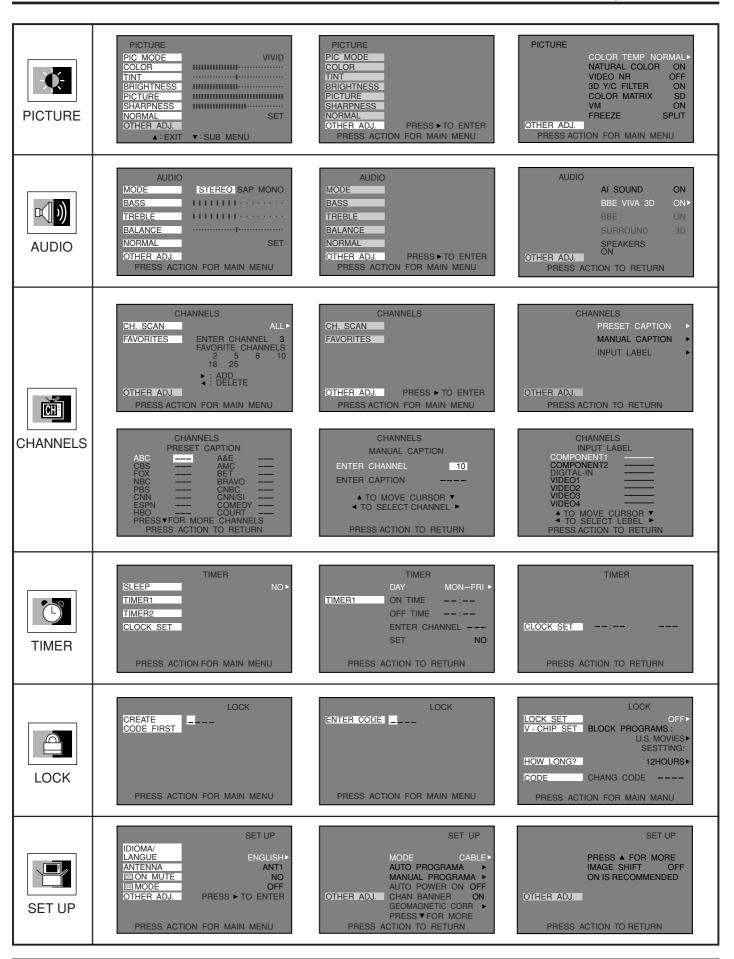
Press to exit from the MENU screen. This returns the set to the normal viewing condition.





NORMAL PICTURE

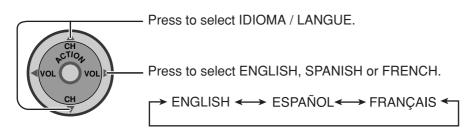
Basic Menu Operations

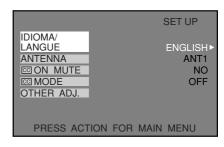


SET UP Operation

MENU Languages

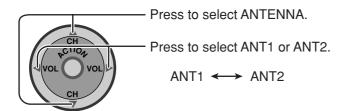
In SET UP Menu, select IDIOMA / LANGUE to change menu language to ENGLISH, ESPAÑOL (Spanish) or FRANÇAIS (French).

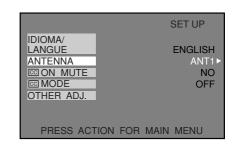




ANTENNA Selection

To select either ANT1 or ANT2.





CC ON MUTE CC MODE (Closed Captions)

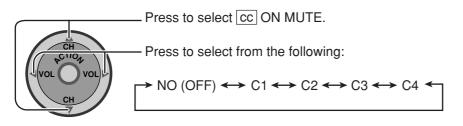
This receiver has a built in decoder that provides a visual depiction of the audio portion of a television program in the form of written words across the screen (white or colored letters on a black background). It allows the viewer to read the dialogue of a television program or other information.

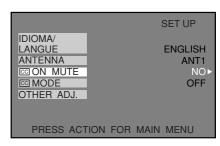
cc ON MUTE

Activates the On-Screen Closed Caption feature, when the MUTE button on the Remote Control is pressed. To deactivate, press the MUTE button again.

Note:

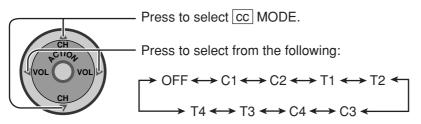
This feature functions when the Closed Caption Mode is in the "OFF" position. The program being viewed must be broadcast with Closed Caption.

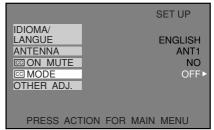




cc MODE

Activates the On-Screen Closed Caption feature. When activated this feature will remain on until OFF is selected in this menu.





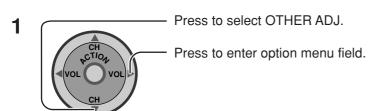
- CAPTION OFF Recommended mode when Closed Caption is not being used.
- **CAPTION C1** For video related information that can be displayed (up to 4 lines of script strategically placed on the television screen so that it does not obstruct relevant parts of the picture).
- CAPTION C2 Another mode used for video related information.
- **TEXT T1** Blanks out a large portion of the picture on the television screen, and displays program guide or any other information currently being transmitted.
- **TEXT T2** Another mode which displays information and blanks out a large portion of the picture on the television screen.
- CAPTION C3 Another mode used for video related information.
- CAPTION C4 Another mode used for video related information.
- TEXT T3 Another mode which displays information and blanks out a large portion of the picture on the
 - television screen.
- **TEXT T4** Another mode which displays information and blanks out a large portion of the picture on the television screen.

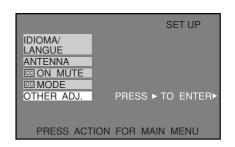
Notes:

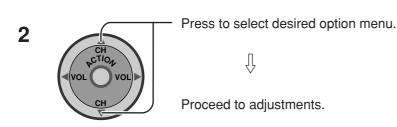
- (1) Recommended menu Set Up for Closed Caption when using Mute Button.
 - cc ON MUTE: C1
- (2) The setting for CC ON MUTE is valid only when the CC MODE is OFF. CC MODE set to ON will override CC ON MUTE. This menu cannot be selected when the MAIN picture is displaying a COMPONENT VIDEO INPUT of 480i or more.
- (3) When aspect is ZOOM, Closed Caption cannot be used.

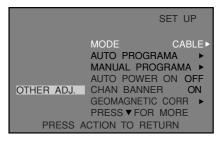
Selecting option menus in OTHER ADJ.

To select option menus in OTHER ADJ.



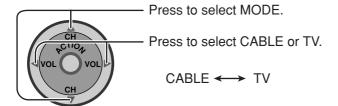


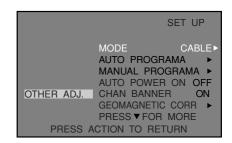




MODE Selection

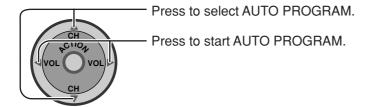
To select either CABLE or TV.

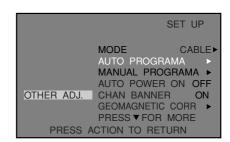




AUTO PROGRAM

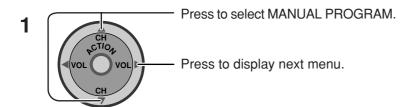
To automatically program all channels with signal.

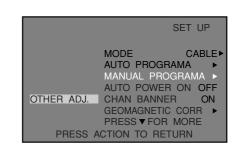


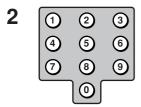


MANUAL PROGRAM

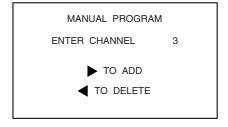
To manually add or delete channels.







Use remote numeric keypad to select desired channel.

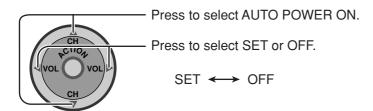


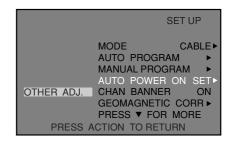
Press to ADD or DELETE the channel.

3

AUTO POWER ON

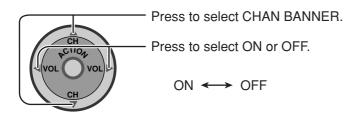
Select SET to power up the TV at the same time as the cable box or other components or select OFF.

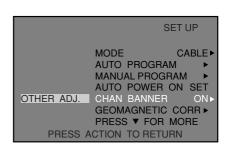




CHAN BANNER

Select ON to display the CHANNEL BANNER on the screen or select OFF.

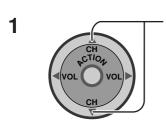




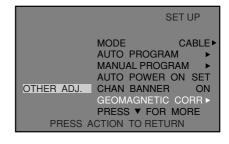
Geomagnetic correction (Adjusting skewing of images)

GEOMAGNETIC CORR (CORRECTION) adjusts to erase the discoloration of the picture due to earth's magnetic field in the area.

This correction is made when moving the TV set or when image is slightly skewed.

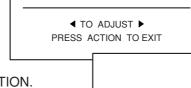


- Press to select GEOMAGNETIC CORR.





Adjust the vertical bar left or right until the discoloration disappears.



GEOMAGNETIC CORRECTION

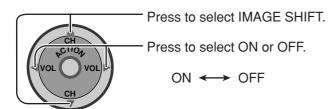
0 -----

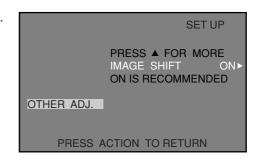
Press to exit GEOMAGNETIC CORRECTION. "DEGAUSSING" will be displayed for three seconds.

DEGAUSSING

IMAGE SHIFT

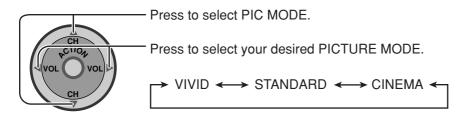
For use as a screen saver, this function changes the entire image position (shift).

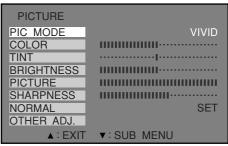




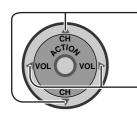
PICTURE Adjustment

PICTURE MODE





COLOR / TINT / BRIGHTNESS / PICTURE / SHARPNESS / NORMAL



Press to select each submenu (COLOR / TINT / BRIGHTNESS / PICTURE / SHARPNESS / NORMAL).

Press to adjust the desired level by looking at the picture behind the menu.

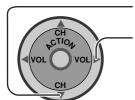
PICTURE	
PIC MODE	VIVID
COLOR	
TINT	
BRIGHTNESS	111111111111111111111111111111111111111
PICTURE	
SHARPNESS	111111111111111111111111111111111111111
NORMAL	SET
OTHER ADJ.	
▲:EXIT	▼:SUB MENU

Item	Function
COLOR	Adjusts desired color intensity.
TINT	Adjusts natural flesh tones.
BRIGHTNESS	Adjusts dark areas of picture.
PICTURE	Adjusts white areas of picture.
SHARPNESS	Adjusts clarity of outline detail.
NORMAL	Resets all picture adjustments to factory default settings.

Selecting option menus in OTHER ADJ.

To select option menus in OTHER ADJ.

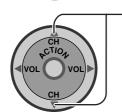
1



Press to select OTHER ADJ.

Press to enter option menu field.

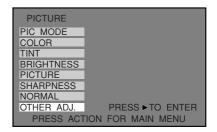
2

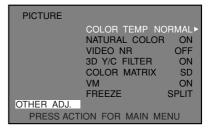


Press to select desired option menu.

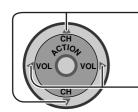


Proceed to adjustments.





COLOR TEMP (Temperature) / NATURAL COLOR / VIDEO NR / 3D Y/C FILTER



Press to select each option menu (COLOR TEMP / NATURAL COLOR / VIDEO NR / 3D Y/C FILTER).

Press to adjust the desired level by looking at the picture behind the menu.

PICTURE	
COLOR TEMP NO	RMAL▶
NATURAL COLOR	ON▶
VIDEO NR	OFF▶
3D Y/C FILTER	ON▶
COLOR MATRIX	SD
VM	ON
FREEZE S	SPLIT
OTHER ADJ.	
PRESS ACTION FOR MAIN MEI	NU

PICTURE

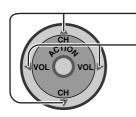
OTHER ADJ.

Item	Mode	Explanations
COLOR TEMP (temperature)	NORMAL WARM COOL	To increase or decrease WARM (red) and COOL (blue) colors to suit personal preferences.
NATURAL COLOR	ON ←→ OFF	To increase the color reproduction range with natural color gradation and highly delicate hues.
VIDEO NR	ON ←→ OFF	Reduces noise in the channel, commonly called snow. Remains off when receiving a strong signal.
3D Y/C FILTER	ON ←→ OFF	Minimizes noise and cross color in the picture.

COLOR MATRIX

Displays input signals (480p signals) in a natural color from digital equipment adaptors connected to COMPONENT VIDEO INPUT (Y, Pb/Cb , Pr/Cr input terminals).

Select HD or SD to automatically adjust color parameters for HD (high definition) and SD (standard definition).



Press to select COLOR MATRIX.

Press to select SD or HD.

SD: When the input signal is a normal TV system (NTSC).

HD: When the input signal is a High-Definition system (ATSC).

Note:

- (1) When viewing a non-standard DTV signal format, you can change color parameters manually for the best picture quality.
- (2) COLOR MATRIX does not need to be set when using High-Definition equipment or 480i output equipment. Use only for 480p signal source.

ON

OFF ON

ON

COLOR TEMP NORMAL NATURAL COLOR ON

VIDEO NR 3D Y/C FILTER

COLOR MATRIX

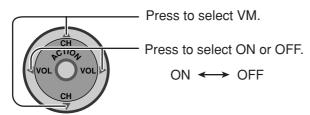
S ACTION FOR MAIN MENU

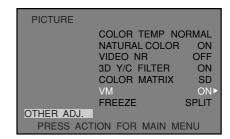
FREEZE

PICTURE Adjustment

VM (Velocity Modulation)

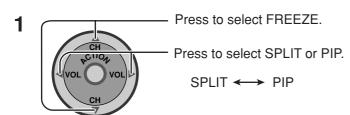
Select ON to emphasize the edge of an image, or select OFF.

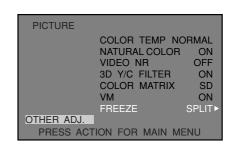




FREEZE

Select SPLIT or PIP to determine the frozen picture frame during single screen.





2 FREEZE TV/VCR When the screen is single press TV/VCR to freeze the screen.



FREEZE

- FREEZE

When FREEZE SPLIT is selected.

When FREEZE PIP is selected.

3 FREEZE TYVVCR Press TYVVCR again to recover.

Notes: FREEZE (1) When TV/VCR is pressed during Split Screen, the Split Screen will be frozen and the main picture continues action (see page 47).



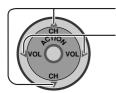
(2) When TV/VCR is pressed during PIP Operation, the PIP frame will be frozen and the main picture continues action (see page 46).



· PIP frame (FREEZE)

Audio Adjustment

Selecting STEREO/SAP/MONO



Press to select MODE.

Press to select STEREO / SAP / MONO. Red display - Signal available White display - Signal not available

Note:

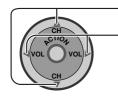
AUDIO MODE selection is also possible by pressing the button on the remote control (see page 17).



Helpful Hints:

- STEREO Two channel Audio reception.
- SAP Second Audio Programming (typically used for bilingual audio).
- MONO Use when stereo signal is weak.

Selecting BASS / TREBLE / BALANCE / NORMAL



Press to select BASS / TREBLE / BALANCE / NORMAL.

Press to adjust the desired level by listening to the sound.

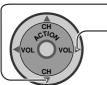
AUDIO	
MODE	STEREO SAP MONO
BASS	
TREBLE	
BALANCE	
NORMAL	
OTHER ADJ.	
PRESS ACT	ION FOR MAIN MENU

Item	Effect	Function
BASS	Less More	Increase or decrease the bass response.
TREBLE	Less More	Increase or decrease the treble response.
BALANCE	Left SP. Right SP.	Emphasize the left / right speaker volume.
NORMAL	NO NO	Reset BASS, TREBLE and BALANCE adjustments to factory default settings.

Selecting option menus in OTHER ADJ.

To select option menus in OTHER ADJ.

1



Press to select OTHER ADJ.

Press to enter option menu field.

2



Press to select desired option menu.

Û

Proceed to adjustments.

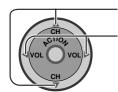




AI SOUND

AI SOUND Equalize overall volume levels across all channels.(Al sound is not available in VIDEO mode).

Press to select AI SOUND.



Press to select ON or OFF.

ON ←→ OFF

Note: AI SOUND is not available in VIDEO mode.

BBE VIVA / BBE

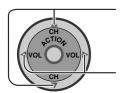
The distinguishing feature of BBE VIVA is its maintenance of accurate audio imagery. Ordinary 3D surround systems force the sound out to the left and right, affecting the center channel. As a result it may become hard to hear people's voices, or the center audio may completely disappear. BBE VIVA reproduces vocals in music and voices in movies accurately and distinctly.

BRF VIVA

This maintains a constant level of sound that is faithful to the original, producing Hi-Fi 3D sound that cannot be obtained with other types of 3D Surround.

BBE

Use special signal processing to accurately reproduce the "attack" of each sound, in order to make it immediate and superbly faithful to the original, while retaining its natural feel.



 Press to select BBE VIVA [With BBE VIVA Version] or BBE [No BBE VIVA Version].

Press to select ON or OFF.

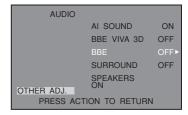
ON ←→ OFF

Notes:

- When "BBE VIVA" is set to ON, "BBE" and "SURROUND" setting are fixed to ON.
- When "BBE VIVA" is set to OFF, "BBE" and "SURROUND" can be set individually.



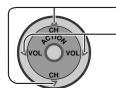
[With BBE VIVA Version]



[No BBE VIVA Version]

SURROUND

To enjoy a concert hall effect, turn the SURROUND to ON. SURROUND function is effective when BBE VIVA is set to OFF.



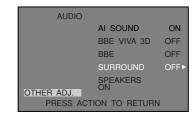
Press to select SURROUND.

Press to select ON or OFF.

ON ←→ OFF

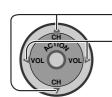


During stereo sound or soft playing : SURROUND → set to ON. During monoural sound : SURROUND → set to OFF.



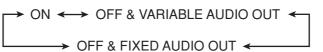
SPEAKERS

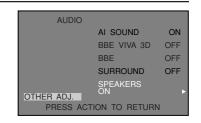
Select the desired SPEAKER mode.



Press to select SPEAKERS.

Press to select your desired mode.





Mode	Function
ON	TV speakers operate normally.
OFF & Variable Audio Out	TV speakers off -audio adjustable by television.
OFF & Fixed Audio Out	TV speakers off -audio adjustable by the external amplifier only.

CHANNELS Adjustment

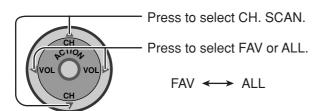
CHANNEL SCAN

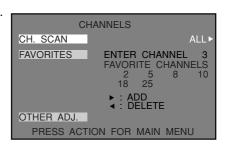
Let you select the channel scanning mode either FAV or ALL.

CHANNEL SCAN FAV

To enter up to 16 favorite channels.

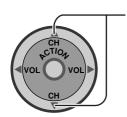
CHANNEL SCAN ALL To scan all channels when using the CH up/down buttons.



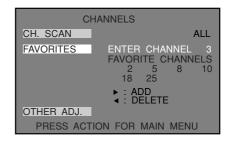


FAVORITE CHANNELS Selection

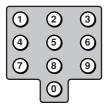
1



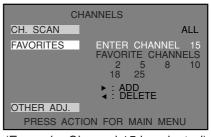
Press to select FAVORITES.



2

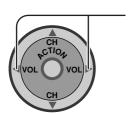


Use remote numeric keypad to select desired channel.

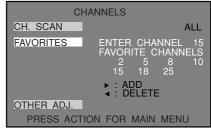


(Example: Channel 15 is selected)

3



Press ▶ to add or ◀ to delete the selected channel.



(Example: Channel 15 is added)

4



Repeat step 2 to 3 up to 16 favorite channels.

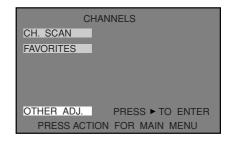
Selecting option menus in OTHER ADJ.

To select option menus in OTHER ADJ.

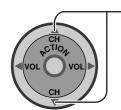


Press to select OTHER ADJ.

Press to enter option menu field.



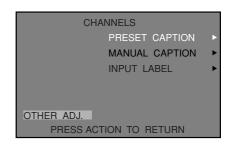
2



Press to select desired option menu.



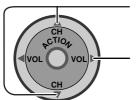
Proceed to adjustments.



PRESET CAPTION

Assign channel numbers to pre-set popular TV stations.

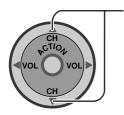
1



Press to select PRESET CAPTION.

Press to display next menu.

2



Press to select desired PRESET CAPTION.

CHANNELS

PRESET CAPTION

MANUAL CAPTION

INPUT LABEL

OTHER ADJ.

PRESS ACTION TO RETURN

CHANNELS

PRESET CAPTION

ABC —— A&E ——

CBS —— AMC ——

FOX —— BET ——

NBC —— BRAVO ——

PBS —— CNBC ——

CNN —— CNNSI ——

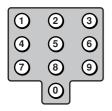
ESPN —— COMEDY ——

HBO —— COURT ——

PRESS FOR MORE CHANNELS

PRESS ACTION TO RETURN

3



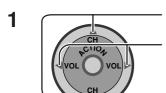
Use remote numeric keypad to select desired channel (refer to your local TV guide).

Note:

To delete a channel, press **◄ VOL** while channels highlighted.

MANUAL CAPTION

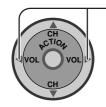
Enter channel numbers and captions manually.



- Press to select MANUAL CAPTION.

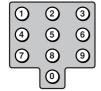
Press to display next menu.

2



Press to enter desired channel.

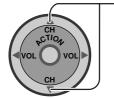
OR



Use remote numeric keypad to select desired channel (refer to your local TV guide).

Press to select ENTER CAPTION.

3



Press to select characters.

4 VOL V JL V

Press to move cursor.

Note:

Repeat Step 4 up to 4 characters.

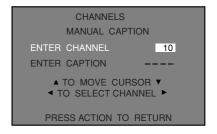
In MANUAL CAPTION up to 4 characters can be selected as a CAPTION.

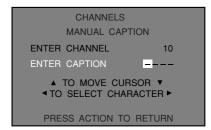
CHANNELS

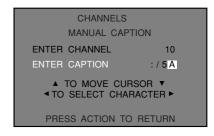
PRESET CAPTION
MANUSL CAPTION
INPUT LABEL

OTHER ADJ.

PRESS ACTION TO RETURN



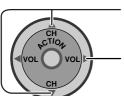




INPUT LABEL

Label video input connections to display optional equipment.

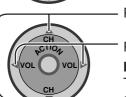
1



Press to select INPUT LABEL.

Press to display next menu.

2



Press to move cursor.

Press to select desired LABEL.

Note:

To skip, select LABEL, then press ◀ VOL or VOL ▶ to select "SKIP". The selected INPUT mode will be skipped when TV/VIDEO button is pressed.

CHANNELS

PRESET CAPTION

MANUSL CAPTION

INPUT LABEL

OTHER ADJ.

PRESS ACTION TO RETURN

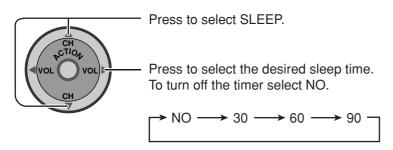


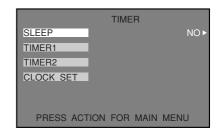
TIMER

The TIMER can switch the TV ON or OFF. Before attempting TIMER1 and TIMER2 confirm the CLOCK SET and adjust if necessary. Then set TIMER1 and TIMER2.

SLEEP

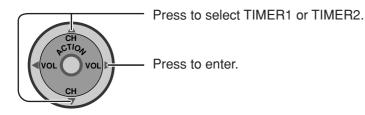
SLEEP sets the sleep time.



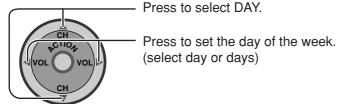


TIMER1 and TIMER2

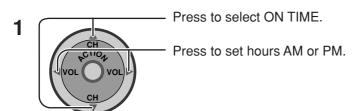
In TIMER menu, select one or both timers to turn the television on and off at selected times, on selected channels, and on selected days. TIME must be entered in CLOCK SET to operate the TIMER features.

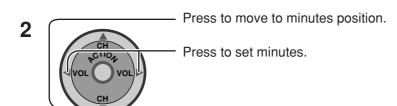


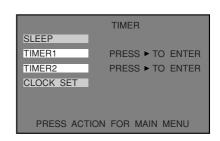
DAY Set the day of the week.

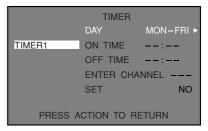


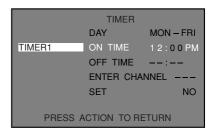
ON TIME Set the time of day.





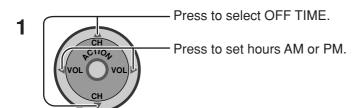


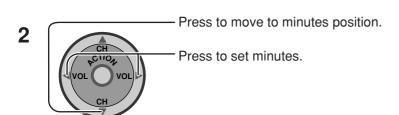






OFF TIME Set the time of day.

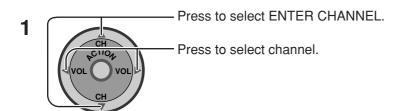


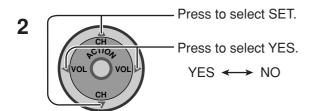


TIMER DAY MON - FRI TIMER1 ON TIME 12:00 PM OFF TIME 13:00 PM ENTER CHANNEL --SET NO PRESS ACTION TO RETURN

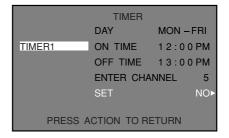


ENTER CHANNEL









TIMER Activation

The TIMER is active when the television is OFF or ON. The television will switch to the selected channel at the selected time set in the TIMER.

Turn Off After 90 Minutes

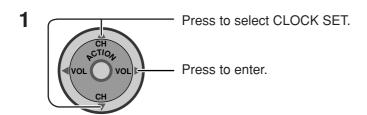
The television automatically turns OFF after 90 minutes when turned ON by the TIMER. If the OFF time is selected or if a key is pressed, the automatic OFF after 90 minutes will be cancelled.

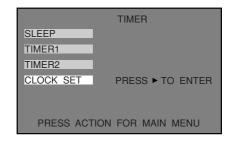
Notes:

- (1) When the power to the TV set is disrupted due to a power outage or similar problem, after power is restored, the off-timer will be deactivated and the TV will be in standby mode.
- (2) To see the remaining sleep time, press the RECALL button.

CLOCK SET

CLOCK SET sets the present time. This is necessary to operate the TIMER features.

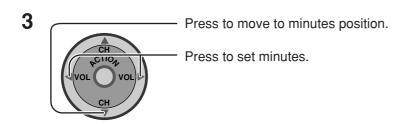




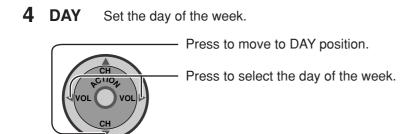
2 TIME Set the time of day.

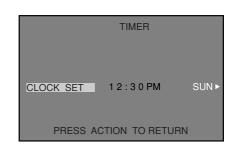








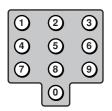




LOCK Feature

CREATE CODE FIRST

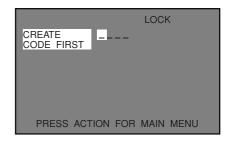
To use LOCK options CREATE CODE FIRST.

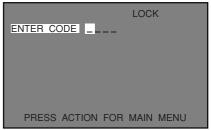


Use the remote numeric keypad to enter a four-digit secret code.

While entering a code, by pressing the up ▲ or down ▼ button you can input a new code again.

After entering your secret code for the first time, the onscreen display will change to ENTER CODE.



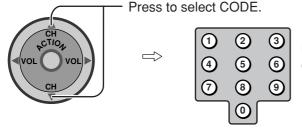


Notes:

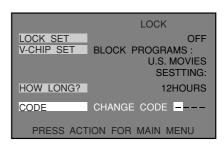
- (1) Use a code that is easy to remember and record it in a safe place.
- (2) If you do not remember your code, LOCK will unlock in 12, 24, or 48 hours, depending on the current setup. Be cautious when selecting ALWAYS. If ALWAYS is selected, and you forget your secret code, the TV must be serviced by a qualified technician to clear the LOCK setup.

CODE

If you select CODE, and you change your code from the one used in the CREATE CODE FIRST or ENTER CODE, your new code becomes the controlling code.

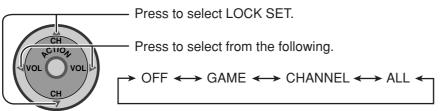


Use the remote numeric keypad to enter a four-digit secret code.

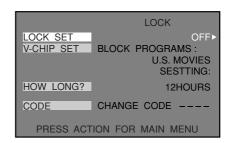


LOCK SET

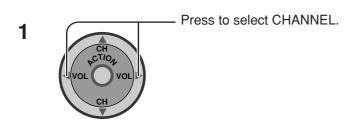
Select LOCK SET to prevent video games and VCR tapes from being viewed.

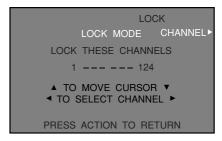


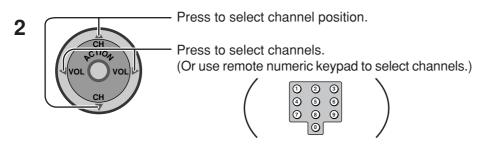
MODE	Function
OFF	Turns Lock function off.
GAME	Lock CH 3, 4 and Video inputs.
CHANNEL	Lock up to four channels.
ALL	Locks all channels and video inputs.

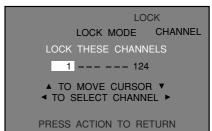


CHANNEL





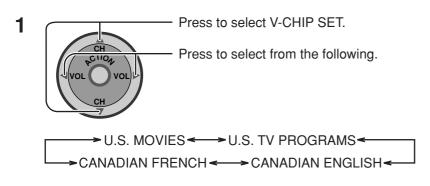


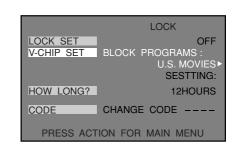


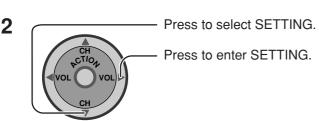
3 Repeat step 2 for up to four channels.

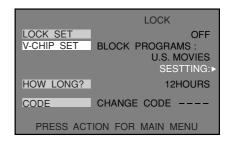
V-CHIP SET

In the United States and Canada, the V-CHIP consists of two rating systems, which are MPAA (MOTION PICTURE) and TV PARENTAL GUIDELINES. Its function is to block programs by following the rating data in the XDS data packets sent from broadcasting stations. The user can select which rating programs should be blocked by using the LOCK MENU options.





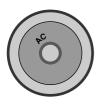




U.S. TV PROGRAMS

U.S. TV PROGRAMS RATING CHART

1



Customer Caution

The V-Chip system that is used in this set is capable of blocking "NR" programs (non rated, not applicable and none) per FCC Rules Section15.120(e)(2). If the option of blocking "NR" programs is chosen "unexpected and possibly confusing results may occur, and you may not receive emergency bulletins or any of the following types of programming:"

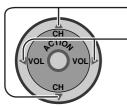
- Emergency Bulletins (Such as EAS messages, weather warnings and others)
- · Locally originated programming · News · Political · Public Service Announcements · Religious · Sports
- Weather

U.S. MOVIES

This TV model features the "V-Chip technology" which allows you to use Motion Picture Ratings when viewing movies or video tapes. This innovation allows parents to block various types of movies and video tapes at their discretion. PIP will also be blocked automatically.

U.S. MOVIES RATING CHART

1

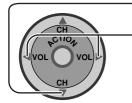


Press to select U.S. MOVIES.

Press to select U.S. MOVIES ON or OFF.

ON ←→ OFF

2



Press to select VIEW NR MOVIES?.

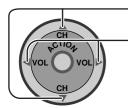
Press to select VIEW NR PROGRAMS? YES or NO.

YES ←→ NO

Note:

Some movies are not rated for a variety of reasons. Old movies and foreign films are usually not rated.

3

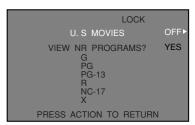


Press to move between different ratings.

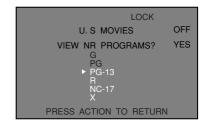
Press to select ratings you would like to block (RED) and unblock (GREEN).

Continue Step3 for each ratings.

Note: See the U.S. MOVIES RATINGS CHART.







PG-13, R, NC-17 and X will be blocked.

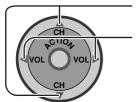
U.S. MOVIES RATINGS CHART

NR	CONTAINS NO RATING (NOT RATED) AND NA (NOT APPLICABLE) PROGRAMS. Movie has not been rated or rating does not apply.
G	GENERAL AUDIENCES. All ages admitted.
PG	PARENTAL GUIDANCE SUGGESTED. Some material may not be suitable for children.
PG-13	PARENTS STRONGLY CAUTIONED. Some material may be inappropriate for children under 13.
R	RESTRICTED. Under 17 requires accompanying parent or adult guardian.
NC-17	NO ONE 17 AND UNDER ADMITTED.
Х	ADULTS ONLY.

Canadian English

The V-CHIP used in this TV model allows you to block various types of movies and television programs based on the two rating systems used in Canada. PIP will also be blocked automatically.

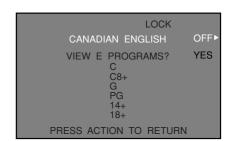
1



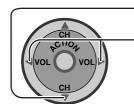
Press to select CANADIAN ENGLISH.

Press to select CANADIAN ENGLISH ON or OFF.

ON ←→ OFF



2

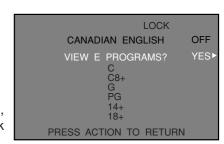


Press to select VIEW E PROGRAMS?

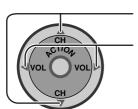
Press to select VIEW E PROGRAMS? YES or NO.

Note:

E (Exempt) programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.



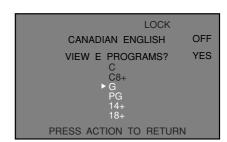
3



Press to move between different ratings.

Press to select ratings you would like to block (RED) and unblock (GREEN).

Note: See the CANADIAN ENGLISH RATING CHART.



CANADIAN ENGLISH RATINGS CHART

E	Exempt - Exempt programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.
С	Programming intended for children under age 8. No offensive language, nudity or sexual content.
C8+	Programming generally considered acceptable for children 8 years and over. No profanity, nudity or sexual content.
G	General programming, suitable for all audiences.
PG	Parental Guidance suggested. Some material may not be suitable for children.
14+	Programming contains themes or content which may not be suitable for viewers under the age of 14. Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens.
18	ADULTS ONLY

Canadian French

The V-CHIP used in this TV model also lets you block or unblock Canadian French programs according to various ratings categories. PIP will also be blocked automatically.

Press to select CANADIAN FRENCH.

Press to select CANADIAN FRENCH ON or OFF.

ON
OFF



LOCK
CANADIAN FRENCH OFF
VIEW E PROGRAMS? YESP

G
8 ANS+
13 ANS+
16 ANS+
18 ANS+
PRESS ACTION TO RETURN

CANADIAN FRENCH RATINGS CHART

E	Exempt - Exempt programming.
G	General - Programming intended for audience of all ages. Contains no violence, or the violence content is minimal or is depicted appropriately.
8 ANS+	8+ General - Not recommended for young children. Programming intended for a broad audience but contains light or occasional violence. Adult supervision recommended.
13ANS+	Programming may not be suitable for children under the age of 13 - Contains either a few violent scenes or one or more sufficiently violent scenes to affect them. Adult supervision strongly suggested.
16ANS+	Programming may not be suitable for children under the age of 16 - Contains frequent scenes of violence or intense violence.
18ANS+	18 ans +Programming restricted to adults. Contains constant violence or scenes of extreme violence.

2

Blocking Message

If V-Chip is enabled and the program exceeds the rating limit set by you, the blocking message will appear and the audio will be muted. Enter your four-digit secret code if you wish to continue viewing the program. After entering your code, all locks and rating blocks are disabled until the TV is turned off or until all settings are off.

Note:

If you enter your four-digit secret code to override rating blocks, you must reset all rating blocks by either reprogramming or turning the TV off.

PROGRAM RATING EXCEEDED

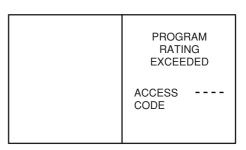
ACCESS CODE ----

Split Screen Blocking Message

Split Screen function is available when V-Chip is activated. If the program being viewed in Split Screen exceeds the set rating limit, Split Screen will disappear and a blocking message will be displayed.

Note:

Enable Split Screen functions by setting Lock Set, U.S. TV PROGRAM, U.S. MOVIES, CANADIAN ENGLISH and/or CANADIAN FRENCH to OFF.

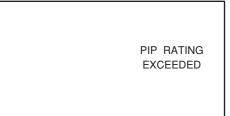


PIP Blocking Message

PIP function is available when V-Chip is activated. If the program being viewed in PIP exceeds the set rating limit, PIP will disappear and a blocking message will be displayed.

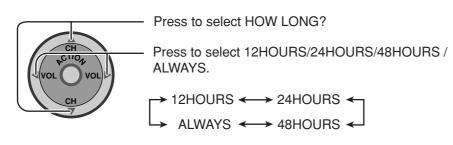
Note:

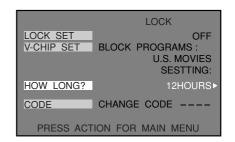
Enable PIP functions by setting Lock Set, U.S. TV PROGRAM, U.S. MOVIES, CANADIAN ENGLISH and/or CANADIAN FRENCH to OFF.



HOW LONG?

After setting the LOCK SET and V-CHIP SET, set the blocking hours.





Picture in Picture Operation

This television includes a two-tuner Picture In Picture (PIP) feature. This allows you to watch two (2) live broadcasts at the same time with or without an external video source such as a VCR, cable box, etc.

Basic PIP Operation



Press the PIP button on the remote control to display the PIP Frame on screen.

Note:

Audio is from Main Picture only.





Select channels for the PIP frame by pressing



3 VOL VOL

Press to select channel for the Main Picture.

or

Use the remote control numeric keypad.





Main Picture

Picture-in-Picture Frame

4 RECAL

Press to view picture source status.

5 PIP

Press PIP again to cancel the PIP Frame.



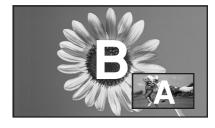
SWAP

Ö

Press oswitch the PIP and MAIN PICTURE source.







STOP

Panasonic

Picture in Picture Operation

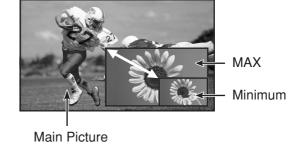
PIP MIN, PIP MAX



These features are used to size PIP Frame.

Press $\stackrel{\text{PIP MIN}}{\blacktriangleleft}$ or $\stackrel{\text{PIP MAX}}{\blacktriangleright}$ to size the PIP Frame.

Freeze TV/VC



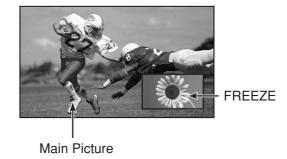
During PIP operation this feature is used to stop action in PIP frame.

- 1 Press TYVCR to stop PIP frame action.
- 2 Press TVVCR again to continue action.

Note:

To stop action for Main picture:

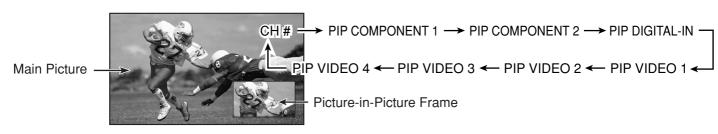
- 1 In PICTURE MENU OTHER ADJ, select FREEZE PIP or SPLIT (see p26).
- 2 Press TV/VCR while PIP frame is not displayed.



TV/VIDEO Button



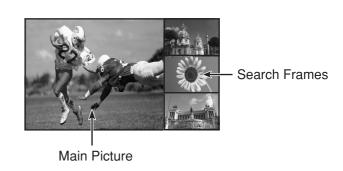
Press when PIP frame is displayed to select desired input mode.



Search SEARCH OPEN/CLOS

This feature lets you scan through all available channels.

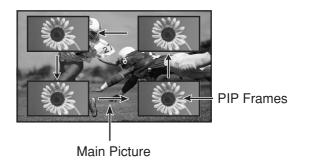
- Press OPENICLOSE to display search frames.
- Press openical again to stop search feature. This returns the screen to the previous condition (single screen, PIP screen or SPLIT screen).



Move O

This feature is used to move PIP frame to one of four corners.

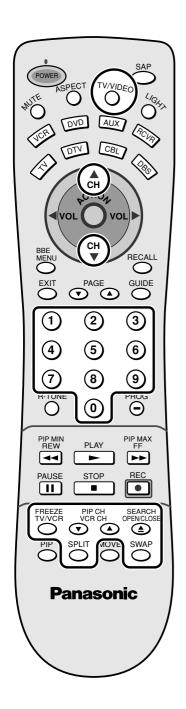
Press oposition PIP frame to desired corner.



Split Screen

This feature lets you watch two different channels side by side with or without an external video source. The audio is from the Main picture only (left side).

Split screen enables you to search other channels on the right screen or check video recording status.



Splitting the screen

1 Press SPLIT to display Split screen.



(The previously selected screen appears.)

Returning to one screen.

Press SPLIT again to return.



Freezing pictures

Main Picture

During Split Screen this feature is used to stop action in SPLIT screen.

1 FREEZE TWYCE TO Stop action in SPLIT screen.



2 Press TV/VCR again to recover.

Note:

To stop action for Main picture:

- 1 In PICTURE MENU OTHER ADJ, select FREEZE PIP or SPLIT (see p26).
- 2 Press TVVCR while SPLIT frame is not displayed.

Notes:

- (1) Sound from the left screen is output from the speakers on the TV set (and headphone jack).
- (2) When the screen is split, signals of the left screen are output from the rear monitor output terminal.
- (3) The left and right screens are processed by individual circuits, and therefore, may have slight variation in image quality.
- (4) Split screen returns to single screen when the TV is turned off.
- (5) The right and left screens cannot display the same picture at the same time.

Changing the channels for the Split Screen

PIP CH VCR CH

Select channels for the Split Screen by pressing $\bigvee^{\text{PIP CH}}_{\text{VCR CH}}$.





Changing the channels for the Main Picture





Select channels for the Main Picture by pressing CH The or use the remote control numeric keypad.



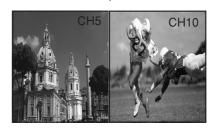


Swapping left and right screens

SWAP

Press on to switch the SPLIT SCREEN and MAIN PICTURE source.

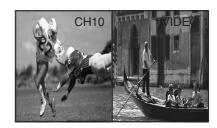




Viewing Videos

TV/VIDEO

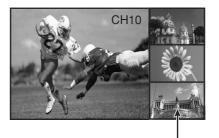
While Split screen is displayed, press $\overset{\text{TV/VIDEO}}{\bigcirc}$ switch modes.



Searching the other channels



press OPENICLOSE to search the other channels.



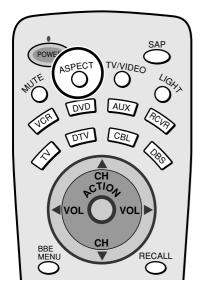
Search Frames

Press open again to stop the search.

This returns the screen to its previous condition.

ASPECT Controls

The color monitor will allow you to enjoy viewing the picture at its maximum size, including wide screen cinema format picture.





ASPECT button

The aspect mode changes each time the ASPECT button is pressed.

$$\rightarrow$$
 4:3 \rightarrow ZOOM \rightarrow FULL \rightarrow JUST \rightarrow

Notes:

(1) For a 480p signal input during component input signal mode, the mode will change as follows:

FULL
$$\longrightarrow$$
 4:3 \longrightarrow ZOOM \bigcirc

- (2) When a 1080i signal is being received, the mode is set to FULL, and aspect switching is not possible.
- (3) During PIP operation, ASPECT Controls are available only in the main picture according to the receiving signal of the main picture.
- (4) During SPLIT Screen, ASPECT Controls are not available.

Mode	Picture	Explanation
4:3	4:3	4:3 will display a 4:3 picture at its standard 4:3 size.
ZOOM	3 →	ZOOM mode magnifies the central section of the picture.
FULL	3 + FULL 9 9	FULL will display the picture at its maximum size but with slight elongation.
JUST	3 →	JUST mode will display a 4:3 picture at its maximum size but with aspect correction applied to the sides of the screen so that elongation is only apparent at the left and right edges of the screen. The size of the picture will depend on the original signal.

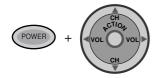
Programming The Illuminated Remote Control Using Access Codes

The Universal Remote Control can be programmed to operate many manufacturers' components, using the component function buttons for VCR, DVD, AUX, RCVR, TV, DTV CABLE or DBS. Follow the procedures for programming your Remote Control with or without a code for the component.

Determine the manufacturer of the component and look in the table for the code.

- 1 Confirm that the external component is plugged in and operating.
- 2 Turn the component off.





Press **POWER** and **ACTION** together, **for at least 5 seconds**. After 5 seconds, all the illuminated mode keys will begin to flash. Release the POWER and ACTION keys.

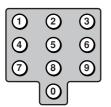




Press the mode key.

The mode key will illuminate steadily, all others will go out.

5



Enter the 3-digit component code using the Remote Control numeric keypad.



Press the Remote Control POWER to test the component. If the procedure is successful, the component will turn on.

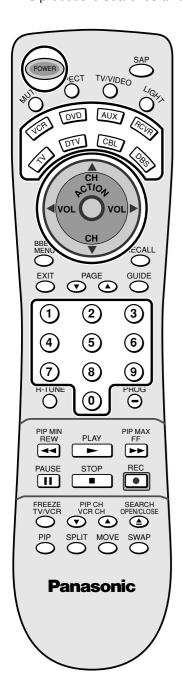
Device	Operates
TV	TV (Panasonic Only)
DTV	DTV (Panasonic Only)
CABLE	CABLE (Preset)
DBS	DBS (Preset)
VCR	VCR (Preset)
DVD/CD	DVD and CD (Preset)
AUX	
RCVR	

Helpful Hints: Unsuccessful Code

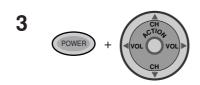
If the component does not operate with the Remote Control, repeat the procedure using another code. (Some brands have multiple codes). If an incorrect code is entered, or if the procedure takes longer than 30 seconds, the programming will fail.

Programming Without A Code (When the code is not known)

This procedure searches all codes and is called the "sequence method."



- 1 Confirm that the external component is plugged in and on.
- 2 Turn the component off.



Press **POWER** and **ACTION** together, **for at least 5 seconds**.

After 5 seconds, all the illuminated mode keys will begin to flash.

Release the **POWER** and **ACTION** key.



Press the mode key.

The mode key will illuminate steadily, all others will go out.

VOL VOL

Press to move forward to the next code, or to move backward.



Press the Remote Control Power to test the component. If the procedure was successful, the component will turn on.

Note:

Repeat the above steps until the component code is found. It may take many attempts before the correct code is found.



After the code is found, press ACTION to store the code.

Note:

The step and set mode will start from the current device (not the beginning of the list, except for the first time).

Infrared Codes Index

The remote control is capable of operating many brands of peripheral equipment. Refer to pages 50 and 51 for programming procedures.

Note: The remote control memory is limited and therefore some models may not operate. The remote control is not designed to control all features available in all models.

Note: After entering the proper infrared code, press the desired Mode Selection Button on the remote control. Refer to pages 16 and 47 - 48 for details on operating peripheral equipment using the remote control.

Infrared Remote Codes for Specific Components			
Helpful Hint: Write down the code numbers for your components in the space provided below. This will serve as a handy reference whenever you need to reprogram your remote control.			
CABLE Cable Box DBS Digital Broadcast System	VCR Video Cassette Recorder RCVR Receiver or Amplifier	CD Compact Disc Player LD Laser Disc Player	
Other Component	Other Component Other Component	Other Component	
Other Component	Other Component	Other Component	



Codes for VCR

Brand	Code
Admiral	335
Aiwa	332
Akai	314, 315, 316, 329
Audio Dynamic	311, 339
Bell &Howell	305, 313
Broksonic	320, 326
Canon	323, 325
Citizen	306
Craig	305, 306, 329
Curtis Mathes	324, 345
Daewoo	301, 324, 343
DBX	310, 311, 339
Dimensia	345
Emerson	303, 319, 320, 325, 326, 343
Fisher	305, 307, 308, 309, 313
Funai	320, 326, 334
GE	324, 333, 345
Goldstar	306
Gradiente	334
Hitachi	300, 323, 345
Instant Replay	323, 324
Jensen	339
JVC	310, 311, 334, 339
Kenwood	306, 310, 311, 339
LXI	300, 305, 306, 307, 308, 309
Magnavox	323, 324, 331
Marantz	310, 311, 339
Marta	306
Memorex	309, 324
MGA	338, 340, 341, 347, 348
Minolta	300, 345
Mitsubishi	338, 340, 341, 347, 348
Multitech	304, 347
NEC	310, 311, 334, 339
Olympic	323, 324
Optimus	306, 321, 328, 335

Brand	Code
Orion	320, 326
Panasonic	321, 322, 323, 324
J.C.Penney	300, 305, 310, 311, 324, 339, 345
Pentax	300, 311, 345
Philco	320, 323, 324, 326, 331, 343
Philips	323, 324, 331
Pioneer	323
Proscan	300, 301, 302, 323, 324, 331,
	333, 345, 346
Quasar	321, 322, 323, 324
Radio Shac	305, 309, 324, 333, 336, 340
RCA	300, 301, 302, 323, 324, 331,
	333, 345, 346
Realistic	305, 309, 324, 336, 340
Samsung	302, 304, 333
Sansui	320, 326, 339, 352
Sanyo	305, 309, 313
Scott	301, 302, 304, 309, 320, 326,
	338, 340, 347, 348
Sears	300, 305, 306, 307, 308
Sharp	335, 336
Shintom	317
Signature 2000	335
Singer	317
Sony	328, 329, 330
Sylvania	323, 324, 331
Tashiro	306
Tatung	310, 311, 339
Teac	310, 311, 339
Technics	321, 322, 323, 324
Teknika	324
Toshiba	301, 346
Vector Research	311
Wards	306, 309, 335, 336, 344
Yamaha	305, 310, 311, 339
Zenith	306, 344



Codes for Personal Video Recorders

Brand	Code
Panasonic Replay	100
Philips Tivo	101
Sony Tivo	102



Codes for DVD

Brand	Code
Denon	100
Ferguson	101
JVC	109
Mitsubishi	105
Nordmende	101
Panasonic	100
Philips	103
Pioneer	102
RCA	101

Brand	Code
Saba	101
Samsung	110
Sharp	108
Sony	104
Technics	100
Thomson	101
Toshiba	103
Yamaha	100
Zenith	107



Codes for CD

Brand	Code
Admiral	226
Aiwa	233, 235
Carver	229
Denon	242
Emerson	239
Fisher	205
Harman/Kardon	219, 220, 221, 223
Hitachi	207
Jensen	234
JVC	240, 241, 245
Kardon	223
Kenwood	200, 201, 211, 245
LXI/Sears	236
Magnavox	229, 232
Marantz	229
McIntosh	221
Nakamichi	210
Onkyo	214, 215

Brand	Code
Optimus	208, 218, 220, 222
Panasonic	224, 225, 227
Philips	229, 230
Pioneer	208
Quasar	224, 225, 227
RCA	231, 237, 238, 247
Sansui	210, 246
Sanyo	205
Scott	210, 246
Sharp	242, 243
Sherwood	220
Sony	228
Soundesign	244
Teac	212, 216, 218
Technics	224, 225, 227
Victor	240, 241, 245
Yamaha	202, 203, 204



Codes for Cassette Deck

Brand	Code
Aiwa	223, 224, 225
Denon	231
Fisher	203
Jensen	214
JVC	229, 230
Kenwood	200, 207
Marantz	202
Nakamichi	205
Onkyo	208, 209, 213
Panasonic	216, 218

Brand	Code
Philips	222
Pioneer	204
RCA	226, 227, 228
Sansui	205, 210
Sharp	231
Sony	219, 220
Teac	210, 211, 215
Technics	216, 218
Yamaha	201, 202



Codes for Receivers

Brand	Code
Admiral	120
Aiwa	125, 126
Denon	134, 135, 136
Fisher	104
Garrard	113
Harman Kardon	115, 123
Jensen	129
JVC	132, 133
Kenwood	100, 108
Magnavox	127
Marantz	124
McIntosh	116
Nakamichi	106
Onkyo	109, 114

Brand	Code
Optimus	103, 127, 130, 131
Panasonic	118, 119, 121
Philips	123
Pioneer	105, 107
Quasar	118, 119, 121
RCA	103, 105, 127, 130, 131
Sansui	103, 111, 139
Sharp	134, 137
Sony	122
Soundesign	138
Teac	111, 112, 113
Technics	118, 119, 121
Victor	132, 133
Yamaha	101, 102



Codes for Cable Box

Brand	Code	
ABC	124	
Archer	125, 132	
Cableview	105, 132	
Citizen	105, 122	
Curtis	112, 113	
Diamond	124, 125, 132	
Eagle	129	
Eastern	134	
GC Brand	105, 132	
Gemini	122	
General	111, 119, 120, 121, 122, 123,	
Instrument/Jerrold	124, 125, 126, 127	
Hamlin	112, 118, 140, 141, 142, 145	
Hitachi	103, 124	
Macom	103, 104, 105	
Magnavox	133	
Memorex	130	
Movietime	105, 132	
Oak	102, 137, 139	
Panasonic	109, 110, 114	
Philips	106, 107, 128, 129, 130	
Pioneer	101, 116	
Pulsar	105, 132	

Brand	Code
Puser	132
RCA	115
Realistic	132
Regal	112, 118, 140, 141, 142, 145
Regency	134
Rembrandt	105, 132, 137
Samsung	105
Scientific Atlanta	111, 112, 113
Slmark	101, 105
Sprucer	105, 110
Stargate	105, 132
Tel eview	101, 105
Texscan	144
Tocom	135
Toshiba	104
Unika	125, 132
Universal	122, 132
Videoway	106
Viewstar	129, 130
Zenith	100, 117
Zenith /Drae	100
Satellite	



Codes for DBS

Brand	Code
Dish Network	105, 115, 116
(Echostar)	
Echo Star	105
Express VU	105, 115
G.E.	106
G.I.	108
(General Instrument)	
Gradiente	114
Hitachi	103, 111, 112
HNS (Hughes)	103

Brand	Code
Magnavox	101, 102
Panasonic	104
Philips	101, 102
Primestar	108
Proscan	106, 109, 110, 113
RCA	106, 109, 110, 113
Sony	107
Star Choice	103, 108
Toshiba	100
Uniden	101, 102

Mode Operational Key Chart

This chart defines which keys that are operational after programming (if needed), while in the selected remote control mode TV, DTV, CABLE, DBS, VCR, DVD ...etc.

KEY NAME	TV MODE	DTV MODE	CABLE MODE	DBS MODE	
POWER	POWER	POWER	POWER	POWER	
SAP	SAP ON/OFF	_	-	_	
MUTE	MUTE	TV MUTE	CBL MUTE	TV MUTE	
ASPECT	TV ASPECT	DTV ASPECT	-	DBS ASPECT	
TV/VIDEO	TV INPUT SW	TV INPUT SW	TV INPUT SW	TV INPUT SW	
LIGHT	REMOTE BUTTONS	REMOTE BUTTONS	REMOTE BUTTONS	REMOTE BUTTONS	
	CHANNEL UP/DOWN	NAVIGATION UP/DOWN	CABLE CHANNEL UP/DOWN	DBS NAVIGATION UP/DOWN	
JANOT (AND) J.	ACTION	ACTION	ENTER	DBS ACTION	
	VOL + / —	NAVIGATION RIGHT/LEFT	CABLE VOL + / -	DBS NAVIGATION RIGHT/LEFT	
BBE MENU	_	MENU	-	DBS MENU	
RECALL	DISPLAY	PROGRAM INFO.	TV DISPLAY	DBS PROG.INFO	
EXIT	_	EXIT (EPG)ELECTRONIC PROGRAM GUIDE	_	DBS EXIT	
PAGE	_	_	-	DBS PAGE UP/DOWN	
GUIDE	_	GUIDE (EPG)ELECTRONIC PROGRAM GUIDE	-	DBS GUIDE	
0 0 0 0	Select Channel	Select Channel	Select Channel	Select Channel	
	PREVIOUS CHAN OR VIDEO MODE			DBS PREVIOUS	
	_	- DTV PROGRAM/DASH -		DBS PROGRAM/DASH	
PIP MIN / PIP MAX FF	PIP MINIMIZE/ MAXIMIZE	_	_	_	
PLAY -	_	_	-	-	
PAUSE	_			-	
STOP	_	_	_	_	
REC	_	Info (EPG) ELECTRONIC PROGRAM GUIDE	VCR RECORD	DBS RECORD	
FREEZE TV/VCR	PIP FREEZE	_	_	TV/DBS SWITCH	
PIP CH VCR CH	PIP or SPLIT CHAN UP/DOWN	_	TV CHANNEL UP/DOWN	DBS CHANNEL UP/DOWN	
SEARCH OPEN/CLOSE	PIP SEARCH	SEARCH – –		_	
PIP	PIP ON/OFF	FF – –		_	
SPLIT	SPLIT ON/OFF		_	-	
MOVE	MOVE PIP				
SWAP	PIP or SPLIT SWAP	-	_	_	

		DVD MODE		AUX MODE		
KEY NAME	VCR MODE	(DVD)	(CD)	(VCR2)	(TAPE)	RCVR MODE
POWER	POWER	POWER	POWER	POWER	POWER	POWER
SAP	_	_	_	_	_	_
MUTE	TV MUTE	TV MUTE	RCVR MUTE	TV MUTE	RCVR MUTE	RCVR MUTE
ASPECT	-	ı	-	-	_	_
TV/VIDEO	TV INPUT SW	TV INPUT SW	-	TV INPUT SW	TV INPUT SW	TV INPUT SW
LIGHT		REMOTE BUTTONS			REMOTE BUTTONS	REMOTE BUTTONS
	VCR CHAN UP/DOWN	NAVIGATION UP/DOWN	NEXT/PREVIOUS TRACK	VCR CHANNEL UP/DOWN	_	TUNER +/-
VOL (VOL)	TV ACTION	SELECT	ı	TV ACTION	-	_
	TV VOLUME +/-	NAVIGATION UP/DOWN	RCVR VOLUME UP/DOWN	TV VOLUME +/-	RCVR VOLUME +/-	RCVR VOLUME +/-
BBE MENU	_	DVD MENU	_		_	
RECALL	ONSCREEN VCR DISPLAY	DVD DISPLAY	TIME FORMAT	ONSCREEN VCR DISPLAY	_	_
EXIT	_	_	_	-	_	<u>-</u> ,
PAGE (A)	_	SKIP +/-	SKIP +/-	_	_	_
GUIDE	_	TITLE	NEXT TRACK	_	_	_
0 0 0 0 0 0	Select Channel	Select Chapter Number	Select Track Number	Select Channel	_	1 AV1 2 AV2 3 AV3 4 AV4 5 CD 6 TUNER 7 PHONO 8 TAPE 9 AUX
	_	_	_	_	DECK A/B	_
	_	_	_	_	_	_
PIP MIN PIP MAX FF	VCR REW/FF	SKIP SEARCH < <rew></rew> >FF	SEARCH REW/FF	VCR REW/FF	TAPE REW/FF	SURROUND -/+
PLAY -	PLAY	PLAY	PLAY	PLAY	PLAY	_
PAUSE	PAUSE	PAUSE	PAUSE	PAUSE	PAUSE	_
STOP	STOP	STOP	STOP	STOP	STOP	_
REC	VCR RECORD			VCR RECORD	TAPE RECORD	_
FREEZE TV/VCR	TV/VCR SWITCH	_	_	TV/VCR SWITCH	_	_
PIP CH VCR CH	VCR CHANNEL UP/DOWN			VCR CHANNEL UP/DOWN		
SEARCH OPEN/CLOSE	_	OPEN/CLOSE	OPEN/CLOSE	_	OPEN/CLOSE	_
PIP	_	_	_	_	_	_
SPLIT	_	_	_	_	_	
MOVE				-		
SWAP	_		-	_	-	_

Manual de instrucciones [Resumen]

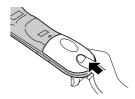
Instalación de las pilas en el control remoto

Se necesitan dos pilas AA.

- 1. Ponga el control remoto con el lado de los botones hacia abajo. Retire la cubierta presionando hacia abajo sobre la marca y deslizándola en el sentido indicado.
- Instale las pilas como se muestra en el compartimiento de las pilas. (Las polaridades + y – deberán coincidir con las márcas correspondientes del compartimiento).

Dos pilas tamaño AA

Vuelva a poner la cubierta y deslícela hasta que quede bloqueada.





Consejos útiles

A los usuarios que utilizan frecuentemente el control remoto se les recomienda sustituir las pilas viejas por pilas alcalinas que duran más.

Consejos útiles

Siempre que retire las pilas, puede que necesite volver a poner las claves del control remoto de infrarrojos. Le recomendamos anotar la clave de la página 49 antes de preparar el control remoto.

Precauciones relacionadas con el uso de las pilas

La instalación incorrecta de las pilas puede causar fugas en las mismas y corrosión, lo que dañará el control remoto.

Tenga en cuenta las precauciones siguientes:

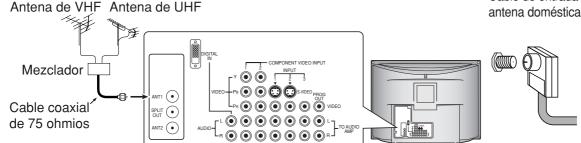
- 1. Las pilas deberán sustituirse siempre en pares. Utilice siempre pilas nuevas cuando sustituya las pilas viejas.
- No mezcle una pila usada con otra nueva.
- No mezcle pilas de tipos diferentes (ejemplo: "carbono y cinc" con "alcalinas").
- No intente cargar, cortocircuitar, desarmar, calentar o quemar las pilas usadas.
- 5. Las pilas tendrán que sustituirse cuando el control remoto funcione esporádicamente o no pueda controlar el televisor.

Conexión del cable de la antena al terminal de entrada de RF

Conexión de la antena

- Para recibir correctamente los canales de VHF/UHF se necesita una antena externa. Para obtener la mejor recepción se recomienda una antena exterior. El modo de antena deberá ponerse en TV.
- · Cable de entrada desde antena doméstica

Conecte la antena doméstica a ANT1 del panel posterior del televisor. Seleccione el modo del televisor y ANT1 en el menú SET UP. (El modo de televisión por cable ha sido prefijado en la fábrica. Los usuarios de antenas deberán cambiar al modo del televisor y seleccionar ANT1 en el menú SET UP bajo Programación de canales.



Cable de entrada de



Cable de entrada de compañía de televisión por cable



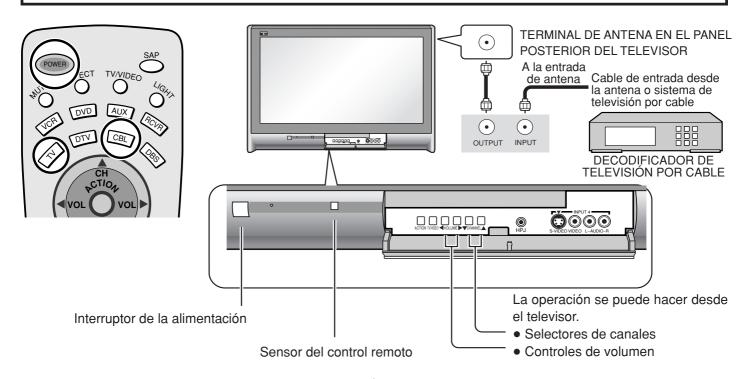
75 ohmios, VHF/ UHF, panel posterior del televisor

Notas:

- (1) Para obtener una imagen y un sonido de calidad óptima se necesita una antena, el cable correcto (coaxial de 75 ohmios) y la clavija de terminación correcta.
- Si se utiliza un sistema de antena comunitaria, tal vez necesite emplear una clavija y un cable de conexión correctos entre el zócalo de antena de pared y su receptor de televisión.
- (3) El centro de servicio de televisión de su localidad o su concesionario podrán ayudarle a obtener el sistema de antena correcto para su zona particular y los accesorios necesarios.
- (4) Cualquier tema relacionado con la instalación de la antena, la mejora de los sistemas o accesorios existentes requeridos y los gastos incurridos son responsabilidad exclusiva de usted, el cliente.



VHF, UHF y CATV

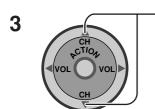


VHF y UHF

1

Presione para controlar el televisor con el control remoto.

Presione para encender el televisor (consulte la página 13).



Presione para seleccionar el canal deseado.

4 VOL VOL

Seleccione el nivel del volumen deseado.

Notas:

- (1) El número del canal y el nivel del volumen se fijan incluso después de apagar el televisor.
- (2) El consumo de energía y el aullido del sonido se pueden reducir si se baja el nivel del volumen.

Televisión por cable

Cuando el cable de la antena se conecte al terminal de antena del televisor vía un decodificador de televisión por cable o una videograbadora, seleccione el canal del televisor CH3 o CH4. Esto no se hace cuando la señal entra desde VIDEO INPUT.

Confirmación

Confirme que el registro con la televisión por cable y la conexión del equipo hayan sido completados. Encienda el sintonizador de televisión por cable y seleccione el nivel de volumen necesario.

- 1 CBL Presione CBL para confirmar.
- Presione mientras apunta el control remoto hacia el decodificador de televisión por cable.

Nota:

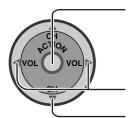
El número de la clave del control remoto está fijado para los productos Panasonic.

Cuando los equipos periféricos no funcionen, reponga la clave (consulte las páginas 49-50).

3 Seleccione el nivel del volumen deseado utilizando el sintonizador de TV por cable.

Operaciones básicas con menús

1



Presione para visualizar la pantalla de menú.

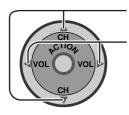
Presione para seleccionar el icono de menú deseado.

Presione para entrar en campo del menú secundario.





2



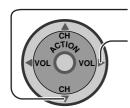
Presione para seleccionar la función de menú secundario deseada.

Presione para seleccionar o ajustar.





[para OTROS AJ.]



Presione para seleccionar OTROS AJ.

Presione para entrar en el campo del menú secundario.



Prosiga con la selección y el ajuste del menú de opciones.





Para volver a MANÚ principal: Para volver a la pantalla anterior:

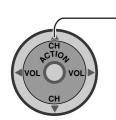


Presione para retornar.





Para finalizar los ajustes:



Presione para salir de la pantalla MENÚ.

Así vuelve a la condición de visión normal.





IMAGEN NORMAL

Operaciones básicas con menús



PICTURE



OTROS AJ.

PRESIONE ACTION PARA MENU

CANALES

ESTEREO SPA MONO

111111111111111

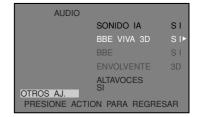
IMAGEN	
MODO	
COLOR	
TINTE	
BRILLO	
CONTRASTE	
NITIDEZ	
NORMAL	
OTROS AJ.	► PARA ENTRAR
PRESION	E ACTION PARA MENU





AUDIO







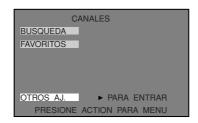
AUDIO

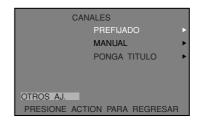
MODO

BAJOS

BALANCE

NORMAL

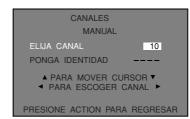






CHANNELS

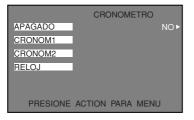


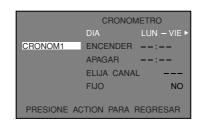


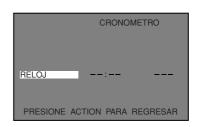




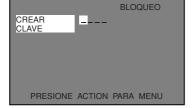
TIMER

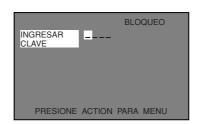


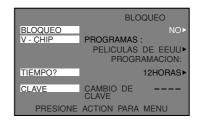






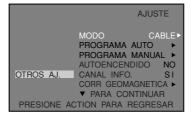


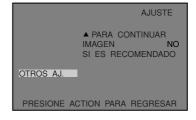






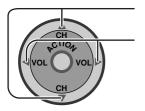






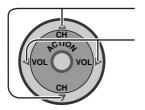
Selección de MODO

Para seleccionar CABLE o TV.



PROGRAMA AUTOMÁTICO

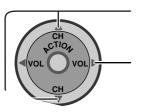
Para programar automáticamente todos los canales con una señal.



PROGRAMA MANUAL

Para agregar o eliminar canales manualmente.

1



Ubicación de los controles

Control remoto iluminado

Botón de la alimentación Púlselo para encender o apagar el televisor (consulte la Nota: El cable de la alimentación del televisor deberá primero al tomacorriente, y el televisor encenders	enchufarse		
el interruptor POWER (modo de espera).	se luego con		
	-		_
Botón MUTE			
Presione este botón para silenciar el sonido	, y púlselo de nuevo	para cancelar el silenciamiento.	
Botones de selección de modo			
Seleccionan el modo de funcionamiento para el control remoto. (Consulte la página 48.)			
Selección del modo de disco de ve4 4453.61 414.788	347.85 ₇ 410.354n d	lel modo d215.8Tc(ó)Tj/vro para eo	
para el control remoto	AUX FOR		
	Botón R-TUNE - Cambia al canal o	modo de vídeo anterior.	
Funcionamiento de otro dispositivo			



Troubleshooting Chart

Before calling for service, determine the symptoms and follow suggested solutions.

Symptoms			Calutions	
V	IDEO	AUDIO		Solutions
	Snowy Video		Noisy Audio	Adjust Antenna Location and Connection
	Multiple Image		Noisy Audio	Adjust Antenna Location and Connection Check Antenna Lead-in Wire
	Interference		Noisy Audio	Move Television away from Electrical Appliances, Lights, Vehicles and Medical Equipment
	Normal Video		No Audio	Increase Volume Check Mute Check Television SPEAKERS on/off Change Channel
	No Video with Snow		Noisy Audio	Set TV or Cable Mode Properly Check Antenna Cables
?	No Video / No PIP	(**	No Audio	Check Power Cord is Plugged into Active Outlet Adjust Brightness and Audio Controls Change Channel Check Cable Connections Program the Remote Control Again Check Second Video Source Operation
	No Color		Normal Audio	Adjust Color Settings Change Channel
	Normal Video	K)	Wrong Audio	Check Audio Is Set To Stereo or Mono, Not SAP
	Black Box on Screen		Normal Audio	Change CC (Closed Captioning) from Text Mode
	Normal Video		Normal Audio	Replace Remote Control Batteries
Intermittent Remote Control Operation				

Cleaning

To ensure continued excellent performance by this product, periodic cleaning is recommended.

The unit contains many plastic parts. For this reason DO NOT use benzine, thinner or other chemicals to clean the unit.	Dust will accumulate on the picture screen. Please wipe with a soft cloth from time to time. If you use a chemically treated cloth, please be careful to follow the instructions that come with the cloth.
DO NOT bring into contact with insecticide or other volatile substances. DO NOT allow the unit to come into contact for extended periods with rubber or vinyl products.	Remove dirt and soiling by wiping with a light cloth. Even if the unit is heavily soiled, do not apply cleaner directly to the unit. Soak a cloth in a solution of neutral cleanser thinned with water. Then wring out the cloth, wipe the unit clean, and finish by wiping with a dry cloth.

Specifications

		CT-34WX53			
Power S	Source	AC 120 V, 60 Hz			
Power (Consumption	Average use: 165 W (Maximum Current 3.7 A) Stand-by condition: 0.2 W			
CRT		34-inch, 16 : 9 aspect	ratio		
Screen	Size	29.33 " (745.0 mm) (W	/) × 16.50 " (419.0 mm)	(H) × 33.65 " (854.7 mm) (diagonal)	
Dimensions (W × H × D)		35.31 " (897mm) × 25.35 " (644 mm) × 23.15 " (588 mm)			
Mass (Weight)		175 lb. (79.5 kg) Net			
Channe	Capability-181	apability-181 VHF-12 : UHF-56 : Cable-125			
	Speaker	2 Speakers			
Sound	Audio Output	30 W [15 W + 15 W] (10 % THD)			
	Headphone	M3 (3.5 mm) Jack × 1			
FEATURES		Two screen display fuctions 3D Y/C FILTER BBE VIVA LINEAR PIP CLOSED CAPTION V-Chip			
Accessories Supplied		Remote control Transmitter EUR7603ZD0 AA Battery × 2			
Operating Conditions		Temperature : 34 °F - 104 °F (0 ° - 40 °C) Humidity : 20 % - 80 % (non-condensing)			
Connec	tion Terminals	AV INPUT 1- 4	VIDEO (Phono Jack Type) S-VIDEO	1.0 Vp-p (75 Ω)	
				Y : 1.0 Vp-p (75 Ω), C : 0.286 Vp-p (75 Ω)	
			(Mini DIN 4-pin) AUDIO L-R (Phono Jack Type × 2)	0.5 Vrms	
		AV PROG. OUT	VIDEO (Phono Jack Type) AUDIO L-R (Phono Jack Type × 2)	1.0 Vp-p (75 Ω)	
				0.5 Vrms	
		TO AUDIO AMP	AUDIO L-R (Phono Jack Type \times 2)	0.5 Vrms	
		COMPONENT VIDEO INPUT1-2	Y PB / PR AUDIO L-R (Phono Jack Type × 2)	1.0 Vp-p (including synchronization) ± 0.35 Vp-p 0.5 Vrms	
		DIGITAL IN INPUT	DVI 1.0 AUDIO L-R (Phono Jack Type × 2)	24 pin 0.5 Vrms	

Note:

Design and Specifications are subject to change without notice. Weight and Dimensions shown are approximate.

Customer's Record The model number and serial number of this product can be found on its back cover. You should note this serial number in the space provided below and retain this book, plus your purchase receipt, as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.		
Model Number	Serial Number	

Panasonic Consumer Electronics Company, Division of Matsushita Electric Corporation of America One Panasonic Way Secaucus, New Jersey 07094 Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico Inc. ("PSC") Ave. 65 de Infanteria, Km 9.5 San Gabriel Industrial Park, Carolina, Puerto Rico 00985 Panasonic Canada Inc. 5770 Ambler Drive Mississauga, Ontario L4W 2T3